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Newsline

Glaciotectonic studies win high praise

The Terrain Sciences Department of the Alberta Research Council, and Dr. Mark Fenton's research team, have attracted the interest of local industry, as well as the international scientific community, with their glaciotectonic studies.

Of primary importance to the coal mining industry is the department's ability to predict areas of potential highwall failure in the province. The information is used in exploration and mine development planning, allowing coal companies to make design modifications to circumvent the problem. For instance, in an area of potential highwall failure, the company can use a bucket wheel excavator, which operates

at a distance from the mine face, instead of a dragline, which must sit atop the area to be mined. This replanning can save lives, equipment and productivity levels.

The highwall stability study, as it was originally defined, comes to an end shortly, but the job is far from over. Dr. Fenton's team is busy transferring this knowledge to industry in the form of workshops, seminars and in-house training.

"The industry groups we work with have also expressed an interest in our plans to map, on a regional scale, the glaciotectonic terrain within the plains and coal zones of the province. Such a map would provide the coal industry

with information on the easily recognizable areas of disturbed bedrock, which they could again incorporate into their future exploration, or mine planning."

Within the scientific community this research team is respected for its ability to identify and recognize glaciotectonic terrain, the theories developed regarding glaciotectonic formation, and the application of this knowledge to the problems of Alberta industry.

During his attendance at the 12th International Union for Quaternary Research (INQUA) Congress in Ottawa last August, Dr. Fenton was invited to visit Ireland, Norway, Switzerland, and the U.S.S.R. to present guest lectures

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Research Council staff get Olympic fever

Not all of the Research Council's staff attending the 1988 Winter Olympics in Calgary this month will be there as spectators. Some of our employees will be participating members in one capacity or another.

You will have to look hard, but if you attend the opening ceremonies, or watch them on television, you may just see Bob Hipkin, Advanced Technologies, and his wife, Joyce, among the 960 square dancers scheduled to perform. Bob says he and Joyce have been members of the Big Hill Country Dancers in Cochrane for the past 10 years. They and other dancers from Calgary and area have been practicing their six-minute routine in groups of 96 since October.

Bill Kay, Forest Products Laboratories, will be on the slopes of Mount Nakiska as a course judge for the alpine skiing events, including downhill, slalom, giant slalom and combined events.

He has been an active member of the Edmonton Ski Club for the past 18 years, and has been on the board of

directors of the Canadian Ski Association. A senior alpine official, whose specialty is in the area of timing and calculations, Bill says he expects to work 19 out of the 20 days scheduled for these events.

Willem Langenberg, Geological Survey, will be working as a track marshal at the speedskating venue on the University of Calgary Campus. Willem, who has skated competitively himself, has been a member of the Edmonton Speedskating Club for the past 13 years; and has been coaching for the last 10 years. He coached three speedskaters for the Olympic Trials for the Canadian Olympic Speedskating Team. Although none of them made the team, Willem says they finished a very respectable 18th, 38th and 39th.

Denis Nikols, of the same department, has been involved in the administrative aspect of speedskating for the past seven years, acting as President of the Calgary Speedskating Club until recently moving to Edmonton. He will work as chairman of results during the

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Bill Kay, Industrial Technologies, wore a "traditional" uniform when he acted as course judge for the Allsopp Cup, held at Marmot Basin in 1984.

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Please send all submissions and direct all questions to
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**ALBERTA
RESEARCH
COUNCIL**



Coal seams disrupted by glacially induced shearing.

and/or participate in field trips. As well, researchers from both Copenhagen, and Amsterdam, have since met with him to discuss and view glacioteconic terrain in Alberta.

Dr. Fenton says that a number of factors have contributed to his research

team's success in this area. "We have been fortunate to have strong support for our work—from the Research Council, other government departments, and concerned industry groups. Our primary advantage, however, was to have an integrated program with

which to study this disturbed terrain, both within the Terrain Sciences Department and from other departments of the Research Council."

Opportunities grow with increased TIP funding

The Department of External Affairs recently announced that it will triple its funding of the Technology Inflow Program (TIP) over the next four years—an additional \$12.3 million the Alberta Research Council can access to help its private sector clients.

Val Osinchuk, Industrial Development Department, says there are two components of the TIP program—both available to private business, universities and government agencies, who can use them to identify, acquire and adapt innovative technology developed in other countries.

TIP Post Services make use of Canadian government offices abroad to locate and facilitate linkages with foreign sources of technology. Specially assigned Technology Development Of-

ficers will help Canadians identify foreign technology sources and investigate opportunities for collaboration. They also will arrange for prospective partners to be brought together to discuss the technical, commercial and legal aspects of specific technology transfers.

The second component of the program is the TIP Fund. Activities supported by this program, on a cost-shared basis between the applicant and the Department of External Affairs, include:

- exploratory visits to acquire in-depth knowledge of foreign innovations and/or to initiate and implement the transfer of technology to Canada;
- working visits to foreign organizations by Canadian scientists and

engineers to obtain hands-on experience in the development and application of a technology required in Canada;

- working visits to Canada by foreign experts where the Canadian organization will obtain significant benefit from the visitor's expertise; and
- international cooperative research and development projects designed to produce new technologies of interest to Canada.

Bill Ryback, Department of External Affairs, Ottawa, is a program officer for the TIP program. He says that the program was designed to act as a catalyst—to encourage the development of new or improved Canadian

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TIP funding

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products, processes, or services at a faster rate than would be accomplished by developing new Canadian technology. "The majority of proposals we receive come from the business sector, although they will be accepted from government organizations.

"For instance, the Research Council could use these funds to acquire foreign technological innovation, if the need for the technology was shown to be industry driven and of direct benefit to industry. A joint proposal written by the Research Council and its client would be given even higher priority. Lastly, an organization like the Research Council has a strong role to play in helping industry acquire these funds, by verifying and substantiating their stated technological needs."

Proposals from non-federal government applicants must be sponsored. In Alberta this sponsorship, additional information, and assistance with proposal development and contacting overseas Technology Development Officers, may be obtained from the industrial technology advisors of the Research Council's Industrial Development Department.

Applicants may also contact the Department of External Affairs directly. "That way we can provide immediate feedback to the proposal, as well as assistance in formulating and focussing the proposal if it is needed. This contact is often helpful in having a proposal processed and accepted," Mr. Ryback says.

Inquiries and proposals can be directed to:
The Manager
Technology Inflow Program
Science, Technology and Communications Division (TTS)
Department of External Affairs
125 Sussex Drive
Ottawa, Ontario K1A 0G2
Telephone: (613) 996-0971

New safety form useful

From fault finding to fact finding—that is the changed emphasis of the Alberta Research Council's new accident/incident reporting form.

The one-page supervisor's accident/incident investigation report, developed jointly by the Occupational Health Unit and Facilities and Safety Management, was designed to make reporting easier. All accidents, no matter how minor, are to be recorded by the supervisor, with input from the affected employee(s).

Previously, there was too much emphasis on determining who was responsible for an accident, according to Janis Koehler, Occupational Health Unit. "As a result, employees were reluctant to report minor incidents. In the absence of this reporting the Research Council lost opportunities to learn from

accident/incident experience, which could have prevented accidents of the same nature from reoccurring."

Information gathered on the form will be useful in pulling together data relevant to the department, Occupational Health, Safety and Finance. For example, the form will act as a database for compiling an accident/incident history. Based on a review of this history, preventative programs will be developed.

"As our ultimate goal is to prevent the occurrence of accidents and incidents at the Research Council we stress the importance of reporting 'a near miss' on the form," Janis says.

"The new forms are now available in all departments. We encourage our employees to fill them out no matter how minor the incident appears to be."

Optional accident plan available

The Optional Accident plan, a new insurance benefit under the Flexible Benefits Program, is available to employees, or to employees and their families.

Under this insurance plan, a family is defined as a spouse—married or common law—and children between the ages of 14 days and 22 years. Coverage may be extended to children up to the age of 25 years, if they are full-time students.

Staff may purchase insurance in units of \$10 000, to a maximum of 30 units—the total amount purchased being the principal sum. Benefits are payable for loss of life, limb, hearing, sight, and for permanent paralysis due to an accident. They are paid in full or in part, depending upon the extent of the loss. Spouses and children are covered at a percentage of the principal sum.

The plan provides 24-hour coverage, with the following exceptions; suicide, air travel, war, riot, insurrection, and armed forces service.

In addition to the lump sum payments, the plan offers the following features:

- possible rehabilitative training for the injured employee, up to \$2500.
- If an employee with coverage under this plan dies, his or her dependents may be eligible for:
- an occupational training allowance for spouses, to a maximum of \$2500; and
- an education allowance for dependent children, to a maximum of two per cent of the principal sum per year for up to four years.

Staff who wish to join the Optional Accident Plan, or change their coverage, should contact Maja Hoeing, Human Resources Department, at 450-5138. Details of the amounts payable will be included in an information brochure to be distributed as soon as possible.

ALIS makes Calgary a second home

ALIS, the Alberta Oil Sands Technology and Research Authority (AOSTRA) Library and Information Services, has recently established a second office in Calgary, located on the 18th floor of the McFarlane Tower, 700-4th Avenue, S.W.

Helga Petri, who manages both the Edmonton and Calgary branches, says

the level of service and documentation is the same in both locations. "The primary benefit is the speed with which we are now able to serve our southern Alberta clients.

"The new office allows us to promote AOSTRA and the Oil Sands and Hydrocarbon Recovery Department on site in Calgary. Likewise, the informa-

tion we get back from our Calgary contacts will reach our people sooner," she says.

Calgary staff interested in the oil sands and heavy oil industries has direct access to information retrieval services, as well as seminars and workshops—a valuable source of current market information.

Olympic fever

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Olympic speedskating competitions—a job which involves supervising the 30-member timing and results crew.

Taking part in the Olympic Arts Festival was John Beddoes, Electronics Test Centre. He is a member of the Pro Coro Canada Choir of Edmonton. Concerts were given in Calgary, Lethbridge and Edmonton by the Olympic choir, which was composed of Canada's four professional choirs from Vancouver, Edmonton, Toronto and Montreal.

The rest of us also will have ample opportunity to show our Olympic spirit—either as spectators, or by cheering on the Olympic Torch as it travels across Alberta. The torch will make its way through the City of Edmonton on February 10, proceeding past the southeast Edmonton site on Highway 2. It will arrive in Calgary on February 13.

Technical seminar slated March 1

Dr. Leszek Ignasiak, Coal and Hydrocarbon Processing Department, will present the next technical seminar, Tuesday, March 1, at 1 p.m. in the auditorium of the southeast Edmonton site. His topic will be Coal/Oil Agglomeration. The research has attracted international interest, and a consortium of companies from both sides of the border has been formed. This group is financing a \$4 million research project at the Alberta Research Council to further develop the technology.

All staff are encouraged to attend this seminar series, designed to increase awareness and appreciation of our research projects.

Employee changes

We welcome to the Research Council: **Kiry Non Chhom**, Oil Sands and Hydrocarbon Recovery.

We say goodbye to: **Ruth Behnke, Dominique Borneuf, John Edwards, Allan Howard.**

Staff notes

Olaf Neimann, Terrain Sciences Department, has received his Ph.D. in Geography from the University of Alberta with his thesis, "DEM Drainage as Ancillary Data to Enhanced Digital LANDSAT Classification Accuracies".

Olaf works on the Geographic Information Systems (GIS) program at Terrace Plaza.

Mike Curtis, Biotechnology Department, has been appointed to the Board of the Industrial Biotechnology Association of Canada for a one-year term.

Formed in 1986, this association brings together members of the industry to promote the growth of commercial biotechnology in Canada. As a member of the board,

Mike will be involved in the planning and management of association activities, such as forums, seminars and workshops.

The contribution made by Research Council staff to the Edmonton Food Bank, Santas Anonymous and the Christmas Bureau was more than twice what it was in 1986. Donated was 875 kilograms of food and \$879 in cash.

The Research Council's warehouse is now open five days a week. Staff are asked to contact Randy Parsons at 450-5039 to make appointments for warehouse service in order to prevent delays in service.

Management, PSA appoint new members to joint committee

The Alberta Research Council Management/Professional Staff Association (PSA) Joint Committee has recently acquired some new members.

Now representing management as active members are Dorothy Hollands, Secretariat, and Dr. Jan Boon, Geological Survey. They replace Dr. Bob Humphries, former head of Resource Technologies, and Brian Shields, who recently retired. Dr. Duncan Currie will continue to act as management co-chairman. Dr. Arvid Hardin, head of Coal and Hydrocarbon Processing, and Peter Williams, head of Industrial Technologies, will act as alternates.

Representing the PSA as co-chairman is Charles Richmond, Applied Sciences, and newly elected president of the PSA. Laurence Andriashek, Terrain Sciences, and Doug Konkin, Advanced Technologies, will represent professional staff as active members.

Raj Rajan and Helga Petri, Oil Sands and Hydrocarbon Recovery, will act as alternate members.

Established to facilitate communication between the two groups, the joint committee deals with matters of concern to both the professional staff and management. Once agreement is reached on an issue, the joint committee makes its recommendations to the Management Committee for approval and implementation.

A recent example of the joint committee's role is the revision to the policy on payment of membership dues. Staff will now be able to apply the \$100 reimbursed for the payment of annual dues in scientific, technical, or similar societies, to any number of memberships. Previous to the revision, staff could apply the payment to only one membership.